

Patent claims

1. A device for compressing concrete during the manufacture of concrete parts, having
- a bearing structure (1);
 - a formwork device (2) held by the bearing structure (1);
 - a vibration decoupling device (3) provided between the bearing structure (1) and the formwork device (2); and having
 - at least one vibration exciter (4) that acts directly on the formwork device (2);

characterized in that

an excitation frequency of the vibration exciter (4) is not situated in the range of a resonant frequency of a system made up of the bearing structure (1) and the vibration decoupling device (3).

2. The device as recited in Claim 1, **characterized in that** the excitation frequency of the vibration exciter (4) is greater than the resonant frequency of the system made up of the bearing structure (1) and the vibration decoupling device (3).
3. The device as recited in Claim 1 or 2, **characterized in that** the excitation frequency is at least twice as great as the resonant frequency.
4. The device as recited in one of Claims 1 to 3, **characterized in that** the bearing structure (1) is provided with a mass that is as great as possible.
5. The device as recited in one of Claims 1 to 4, **characterized in that** the bearing structure (1) is formed essentially by a concrete base.
6. The device as recited in one of Claims 1 to 5, **characterized in that** the bearing structure (1) is decoupled in terms of vibration from a floor (5) that supports it.

7. The device as recited in one of Claims 1 to 6, **characterized in that** an additional layer (6) is provided between the bearing structure (1) and the floor.

8. The device as recited in one of Claims 1 to 7, **characterized in that** recesses (7) are provided in the bearing structure (1) for accepting the vibration exciters (4).

9. The device as recited in one of Claims 1 to 8, **characterized in that** the vibration decoupling device (3) is fastened to the formwork device (2).

10. A module for installation in a device for compressing concrete, having
- a formwork device (2);
- a vibration decoupling device (3) fastened to the formwork device (2); and having
- at least one vibration exciter (4) fastened to the formwork device (2).

11. The module as recited in Claim 10, **characterized in that** electrical supply lines (8) for the vibration exciter or exciters (4) are fastened to the formwork device (2).

12. The module as recited in Claim 10 or 11, **characterized in that** the electrical supply lines (8) run between the vibration decoupling device (3) and the formwork device (2), and are held on the formwork device (2) by the vibration decoupling device (3).

13. The module as recited in Claim 11 or 12, **characterized in that** the vibration decoupling device has a foam layer (3), and that the electrical supply lines (8) run inside the foam layer (3).

14. The module as recited in one of Claims 11 to 13, **characterized in that** an electrical connecting device (10) is fastened to the formwork device (2) for coupling the electrical supply lines (8) to an electrical supply network.

15. The module as recited in Claim 14, **characterized in that** on the connecting device (10) a central plug connector (12) is provided for coupling to the supply network.

16. The module as recited in Claim 14 or 15, **characterized in that** the electrical supply lines (8) between the terminal device (10) and the vibration exciter (4) are fastened completely to the formwork device (2).

17. The module as recited in one of Claims 14 to 16, **characterized in that** the electrical connecting device (10) is decoupled in terms of vibration from the formwork device (2).

18. A device for compressing concrete during the manufacture of concrete parts,
characterized in that

- a module as recited in one of Claims 10 to 17 is provided, the formwork device (2), the vibration decoupling device (3), and the vibration exciter (4) being completely pre-assembled to form the module; and that
- the pre-assembled module is capable of being placed onto a bearing structure (1).

19. The device as recited in Claim 18, **characterized in that** in the bearing structure (1) recesses (7) are provided for accepting the vibration exciters (4).

20. The device as recited in one of Claims 1 to 9, **characterized in that**

- the formwork device (2), the vibration decoupling device (3), and the vibration exciter (4) are combined to form a pre-assembled module as recited in one of Claims 10 to 17;
- the module is capable of being placed onto the bearing structure (1).